

# **MINOR SOURCE OPERATING PERMIT OFFICE OF AIR MANAGEMENT**

**Dynamax Corporation  
3733 Lexington Park Drive  
Elkhart, Indiana 46515**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 039-11717-00466	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

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The Permittee owns and operates a motor home production plant.

Authorized Individual: DeWayne Creighton Jr., President  
Source Address: 3733 Lexington Park Drive, Elkhart, Indiana 46515  
Mailing Address: P.O. Box 1647, Elkhart, Indiana 46515  
Phone Number: (219) 262-2212  
SIC Code: 3716  
County Location: Elkhart  
County Status: Attainment for all criteria pollutants  
Source Status: Minor Source Operating Permit  
Minor Source, under PSD or Emission Offset Rules;  
Minor Source, Section 112 of the Clean Air Act

### A.2 Emissions units and Pollution Control Equipment Summary

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This stationary source is approved to operate the following emissions units and pollution control devices:

- (a) Six (6) natural gas-fired radiant heaters, identified as R1 through R6, each with a maximum heat input capacity of 0.06 million (MM) British thermal units (Btu) per hour;
- (b) Four (4) natural gas-fired radiant heaters, identified as R7 through R10, each with a maximum heat input capacity of 0.08 MMBtu per hour;
- (c) Four (4) natural gas-fired radiant heaters, identified as R11 through R14, each with a maximum heat input capacity of 0.1 MMBtu per hour;
- (d) One (1) natural gas-fired radiant heater, identified as R15, with a maximum heat input capacity of 0.115 MMBtu per hour;
- (e) Two (2) radiant heaters, identified as R16 and R17, each with a maximum heat input capacity of 0.4 MMBtu per hour;
- (f) Welding operation; one (1) steel MIG welding station, with a maximum wire consumption rate of 0.33 pounds of wire per hour (lb wire/hr), four (4) aluminum MIG welding stations, each with a maximum wire consumption rate of 0.5 lb wire/hr, two (2) oxyacetylene flame cutters, each with a maximum cutting rate of 28 inches per minute, and one (1) plasma cutter, with a maximum cutting rate of 155 inches per minute;
- (g) Woodworking operation with a maximum throughput of 724 pounds of wood per hour, which consists of various woodworking equipment; and
- (h) One (1) paint booth, identified as PB-1, equipped with air assisted airless guns, for painting 0.5 motor homes per hour, using dry filters for overspray control, and exhausting to stacks C1 and C2.

## **SECTION B                    GENERAL CONSTRUCTION CONDITIONS**

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

### **B.1      Permit No Defense [IC 13]**

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This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

### **B.2      Definitions**

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Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

### **B.3      Effective Date of the Permit [IC13-15-5-3]**

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Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

### **B.4      Revocation of Permits [326 IAC 2-1.1-9(5)]**

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Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

### **B.5      Modification to Permit [326 IAC 2]**

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Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source
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### C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source potential to emit of any criteria pollutant is less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) Any change or modification which may increase potential to emit to 250 tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAM prior to making the change.

### C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. IDEM, OAM, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

### C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) The Permittee shall notify the OAM within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

#### C.4 Inspection and Entry [326 IAC 2-7-6(2)]

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Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
  - (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]

#### C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

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Pursuant to [326 IAC 2-6.1-6(d)(3)] :

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAM, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

**C.6 Permit Revocation [326 IAC 2-1-9]**

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Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

**C.7 Opacity [326 IAC 5-1]**

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Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

**C.8 Fugitive Dust Emissions [326 IAC 6-4]**

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The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

**Testing Requirements**

**C.9 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]**

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- (a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:



Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

### **Compliance Monitoring Requirements**

#### **C.10 Compliance Monitoring [326 IAC 2-1.1-11]**

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

#### **C.11 Maintenance of Monitoring Equipment [IC 13-14-1-13]**

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour (this time frame is determined on a case by case basis) until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

#### **C.12 Monitoring Methods [326 IAC 3]**

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

#### **C.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]**

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
  - (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;

- (3) The Compliance Monitoring Requirements in Section D of this permit;
- (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
- (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
  - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
  - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
  - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
  - (3) An automatic measurement was taken when the process was not operating; or
  - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.

## Record Keeping and Reporting Requirements

### C.14 Malfunctions Report [326 IAC 1-6-2]

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Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

### C.15 Annual Emission Statement [326 IAC 2-6]

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- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
  - (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
  - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.16 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.17 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;

- (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented when operation begins.

**C.18 Annual Notification [326 IAC 2-6.1-5(a)(5)]**

- (a) Annual notification shall be submitted to the Office of Air Management stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:  
  
Compliance Data Section, Office of Air Management  
Indiana Department of Environmental Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, IN 46206-6015
- (d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

## SECTION D.1

## EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description

- (a) Six (6) natural gas-fired radiant heaters, identified as R1 through R6, each with a maximum heat input capacity of 0.06 million (MM) British thermal units (Btu) per hour;
- (b) Four (4) natural gas-fired radiant heaters, identified as R7 through R10, each with a maximum heat input capacity of 0.08 MMBtu per hour;
- (c) Four (4) natural gas-fired radiant heaters, identified as R11 through R14, each with a maximum heat input capacity of 0.1 MMBtu per hour;
- (d) One (1) natural gas-fired radiant heater, identified as R15, with a maximum heat input capacity of 0.115 MMBtu per hour;
- (e) Two (2) radiant heaters, identified as R16 and R17, each with a maximum heat input capacity of 0.4 MMBtu per hour;
- (f) Welding operation; one (1) steel MIG welding station, with a maximum wire consumption rate of 0.33 pounds of wire per hour (lb wire/hr), four (4) aluminum MIG welding stations, each with a maximum wire consumption rate of 0.5 lb wire/hr, two (2) oxyacetylene flame cutters, each with a maximum cutting rate of 28 inches per minute, and one (1) plasma cutter, with a maximum cutting rate of 155 inches per minute;
- (g) Woodworking operation with a maximum throughput of 724 pounds of wood per hour, which consists of various woodworking equipment; and
- (h) One (1) paint booth, identified as PB-1, equipped with air assisted airless guns, for painting 0.5 motor homes per hour, using dry filters for overspray control, and exhausting to stacks C1 and C2.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

## Emission Limitations and Standards

### D.1.1 Volatile Organic Compounds (General Reduction Requirements) [326 IAC 8-1-6]

Pursuant to CP-039-8896-00466, issued on April 29, 1998, any change or modification which may increase each facility VOC potential emissions to 25 tons per year or more from the side wall gluing, fiberglass lay-up, undercoating operation, hood and door adhesive coating operation, and the headliner assembly shall require prior approval and be subject to the requirements of 326 IAC 8-1-6 (General Reduction Requirements).

### D.1.2 Volatile Organic Compounds (Miscellaneous Metal Coatings) [326 IAC 8-2-9]

Pursuant to CP-039-8896-00466, issued on April 29, 1998, any change or modification which may increase the VOC actual emissions to 15 pounds per day or more before add-on controls from the metal chassis painting, shall require prior approval.

### D.1.3 Volatile Organic Compounds (VOC) (Surface Coating Limitation: Wood Furniture and Cabinet Coating) [326 IAC 8-2-12]

Pursuant to CP-039-8896-00466, issued on April 29, 1998, the surface coating applied to wood furniture and cabinets shall utilize one of the following application methods:

- Airless Spray Application
- Air Assisted Airless Spray Application
- Electrostatic Spray Application
- Electrostatic Bell or Disc Application
- Heated Airless Spray Application
- Roller Coating
- Brush or Wipe Application
- Dip-and-Drain Application

High Volume Low Pressure HVLP  
Aerosol Spray Cans

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

D.1.4 Particulate Matter (PM) [326 IAC 6-3-2(c)]

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- (a) Pursuant to 326 IAC 6-3-2 (Process Operations), particulate matter (PM) from the welding operation shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

$$E = 4.10 * (1.165E-3)^{0.67} = 0.04 \text{ lbs PM/hour}$$

Based on the above equation, particulate matter emissions from the welding operation shall be limited to 0.04 pounds per hour.

- (b) Pursuant to 326 IAC 6-3-2 (Process Operations), particulate matter (PM) from the woodworking operation shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

$$E = 4.10 * (0.362)^{0.67} = 2.08 \text{ lbs PM/hour}$$

Based on the above equation, particulate matter emissions from the woodworking operation shall be limited to 2.08 pounds per hour.

- (c) Pursuant to 326 IAC 6-3-2 (Process Operations), particulate matter (PM) from the paint booth, identified as PB-1, shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

D.1.5 Preventive Maintenance Plan [326 IAC 1-6-3]

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A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this emissions unit and any control devices.

## **Compliance Determination Requirements**

### **D.1.6 Testing Requirements [326 IAC 2-1.1-11]**

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.1.4 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

### **D.1.7 Volatile Organic Compounds (VOC)**

Compliance with the VOC content and usage limitations contained in Conditions D.1.1 and D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

## **Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]**

### **D.1.8 Particulate Matter (PM)**

Pursuant to CP-039-8896-00466, issued on April 29, 1998, the dry filters for PM control shall be in operation at all times when the surface coating booth is in operation.

### **D.1.9 Monitoring**

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the paint booth (PB-1) stacks (C1 and C2) while the booth is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

## **Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [ 326 IAC 2-6.1-5(a)(2)]**

### **D.1.10 Record Keeping Requirements**

- (a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly for Condition D.1.1 and daily for Condition D.1.2 and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1 and D.1.2.



- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
  - (2) A log of the dates of use;
  - (3) The cleanup solvent usage for each month or each day as applicable;
  - (4) The total VOC usage for each month or each day as applicable; and
- (b) To document compliance with Condition D.1.8, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
COMPLIANCE DATA SECTION**

**MINOR SOURCE OPERATING PERMIT  
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

<b>Company Name:</b>	<b>Dynamax Corporation</b>
<b>Address:</b>	<b>3733 Lexington Park Drive, Elkhart, Indiana 46515</b>
<b>City:</b>	<b>Elkhart</b>
<b>Phone #:</b>	<b>(219) 262-2212</b>
<b>MSOP #:</b>	<b>039-11717-00466</b>

I hereby certify that Dynamax Corporation is      ☒ still in operation.  
   ☐ no longer in operation.

I hereby certify that Dynamax Corporation is  
   ☒ in compliance with the requirements of MSOP 039-11717-00466.  
   ☐ not in compliance with the requirements of MSOP 039-11717-00466.

<b>Authorized Individual (typed):</b>
<b>Title:</b>
<b>Signature:</b>
<b>Date:</b>

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

<b>Noncompliance:</b>

## MALFUNCTION REPORT

### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT FAX NUMBER - 317 233-5967

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6  
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?\_\_\_\_\_, 25 TONS/YEAR SULFUR DIOXIDE ?\_\_\_\_\_, 25 TONS/YEAR NITROGEN OXIDES?\_\_\_\_\_, 25 TONS/YEAR VOC ?\_\_\_\_\_, 25 TONS/YEAR HYDROGEN SULFIDE ?\_\_\_\_\_, 25 TONS/YEAR TOTAL REDUCED SULFUR ?\_\_\_\_\_, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?\_\_\_\_\_, 25 TONS/YEAR FLUORIDES ?\_\_\_\_\_, 100TONS/YEAR CARBON MONOXIDE ?\_\_\_\_\_, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?\_\_\_\_\_, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?\_\_\_\_\_, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?\_\_\_\_\_, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?\_\_\_\_\_. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION \_\_\_\_\_.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC \_\_\_\_\_ OR, PERMIT CONDITION # \_\_\_\_\_ AND/OR PERMIT LIMIT OF \_\_\_\_\_

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ?    Y        N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ?    Y        N

COMPANY: \_\_\_\_\_ PHONE NO. (    ) \_\_\_\_\_  
LOCATION: (CITY AND COUNTY) \_\_\_\_\_  
PERMIT NO. \_\_\_\_\_ AFS PLANT ID: \_\_\_\_\_ AFS POINT ID: \_\_\_\_\_ INSP: \_\_\_\_\_  
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: \_\_\_\_\_

DATE/TIME MALFUNCTION STARTED: \_\_\_\_/\_\_\_\_/20\_\_\_\_        \_\_\_\_ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: \_\_\_\_\_

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE \_\_\_\_/\_\_\_\_/20\_\_\_\_        \_\_\_\_ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO<sub>2</sub>, VOC, OTHER: \_\_\_\_\_

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: \_\_\_\_\_

MEASURES TAKEN TO MINIMIZE EMISSIONS: \_\_\_\_\_

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL\* SERVICES: \_\_\_\_\_  
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: \_\_\_\_\_  
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: \_\_\_\_\_  
INTERIM CONTROL MEASURES: (IF APPLICABLE) \_\_\_\_\_

MALFUNCTION REPORTED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_  
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

\*SEE PAGE 2

**Please note - This form should only be used to report malfunctions  
applicable to Rule 326 IAC 1-6 and to qualify for  
the exemption under 326 IAC 1-6-4.**

**326 IAC 1-6-1 Applicability of rule**

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

**326 IAC 1-2-39 "Malfunction" definition**

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

**\*Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

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## **Indiana Department of Environmental Management Office of Air Management**

### Technical Support Document (TSD) for a Minor Source Operating Permit

#### **Source Background and Description**

**Source Name:** Dynamax Corporation  
**Source Location:** 3733 Lexington Park Drive, Elkhart, Indiana 46515  
**County:** Elkhart  
**SIC Code:** 3716  
**Operation Permit No.:** MSOP 039-11717-00466  
**Permit Reviewer:** Nishat Hydari / EVP

The Office of Air Management (OAM) has reviewed an application from Dynamax Corporation relating to the operation of a motor home production plant which involves the installation of the floor, sidewalls, roof, backwall, frontcap, windows, cabinets, insulation and carpet onto the chassis.

#### **Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

- (a) Six (6) natural gas-fired radiant heaters, identified as R1 through R6, each with a maximum heat input capacity of 0.06 million (MM) British thermal units (Btu) per hour;
- (b) Four (4) natural gas-fired radiant heaters, identified as R7 through R10, each with a maximum heat input capacity of 0.08 MMBtu per hour;
- (c) Four (4) natural gas-fired radiant heaters, identified as R11 through R14, each with a maximum heat input capacity of 0.1 MMBtu per hour;
- (d) One (1) natural gas-fired radiant heater, identified as R15, with a maximum heat input capacity of 0.115 MMBtu per hour;
- (e) Two (2) radiant heaters, identified as R16 and R17, each with a maximum heat input capacity of 0.4 MMBtu per hour;
- (f) Welding operation; five (5) steel MIG welding stations, each with a maximum wire consumption rate of 8.8 pounds of wire per hour (lb wire/hr), one (1) aluminum MIG welding station, with a maximum wire consumption rate of 0.4 lb wire/hr, two (2) oxyacetylene flame cutters, each with a maximum cutting rate of 28 inches per minute, and one (1) plasma cutter, with a maximum cutting rate of 155 inches per minute;
- (g) Woodworking operation with a maximum throughput of 724 pounds of wood per hour, which consists of various woodworking equipment, utilizing one (1) baghouse for particulate matter control; and

- (h) One (1) paint booth, identified as PB-1, equipped with air assisted airless guns, for painting 0.5 motor homes per hour, using dry filters with a 90% control efficiency for overspray control, and exhausting to stacks C1 and C2.

### Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

### Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) Construction Permit 039-8896-00466, issued on April 29, 1998; and  
(b) Administrative amendment 039-11017-00466, issued on July 21, 1999.

### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
C1	Paint booth (PB-1)	16	1.33	5000	ambient
C2	Paint booth (PB-1)	16	1.33	5000	ambient

### Enforcement Issue

There are no enforcement actions pending.

### Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on December 28, 1999.

### Emission Calculations

See Appendix A of this document for detailed emissions calculations (Appendix A, pages 1 through 5).

### Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	10.79

PM-10	10.84
SO <sub>2</sub>	0.01
VOC	41.11
CO	0.73
NO <sub>x</sub>	0.87

HAP's	Potential To Emit (tons/year)
Ethyl Benzene	0.18
Cobalt Compounds	0.05
MEK	2.09
Styrene	3.61
Xylene	7.27
Toluene	2.81
Cumene	0.00
Hexane	2.89
Glycol Ethers	3.06
MIK	1.13
Methyl Methacrylate	0.57
Manganese	0.06
TOTAL	23.73

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any criteria pollutant is equal to or less than 100 tons per year. Therefore, the requirements of 326 IAC 2-7 do not apply.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions  
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

### Actual Emissions

No previous emission data has been received from the source.

### County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	maintenance
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as maintenance attainment for ozone.

- (b) Fugitive Emissions  
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

### Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	3.76
PM10	3.81
SO <sub>2</sub>	0.01
VOC	41.11
CO	0.73
NO <sub>x</sub>	0.87
Single HAP	7.27
Total HAPs	23.73

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

### Part 70 Permit Determination

#### 326 IAC 2-7 (Part 70 Permit Program)

This existing source, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

### Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

### State Rule Applicability - Entire Source

#### 326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it is located in Elkhart County and has the potential to emit more than ten (10) tons per year for of VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).



326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

**State Rule Applicability - Individual Facilities**

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) from motor home production shall be limited by the following:

- (a) Pursuant to 326 IAC 6-3-2 (Process Operations), particulate matter (PM) from the woodworking operation shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

$$E = 4.10 * (0.362)^{0.67} = 2.08 \text{ lbs PM/hour}$$

Based on the above equation, particulate matter emissions from the woodworking operation shall be limited to 2.08 pounds per hour.

Compliance calculation:

$$(3.62 \text{ tons PM/yr}) * (\text{yr}/8,760 \text{ hrs}) * (2,000 \text{ lbs/ton}) = 0.83 \text{ lbs PM/hr}$$

Actual lbs PM/hr (0.83) is less than the allowable lbs PM/hr (2.08), therefore the woodworking operation will comply with the requirements of 326 IAC 6-3-2.

- (b) Pursuant to 326 IAC 6-3-2 (Process Operations), particulate matter (PM) from the welding operation shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

$$E = 4.10 * (0.0222)^{0.67} = 0.32 \text{ lbs PM/hour}$$

Based on the above equation, particulate matter emissions from the welding operation shall be limited to 0.32 pounds per hour.

Compliance calculation:

$$(1.02 \text{ tons PM/yr}) * (\text{yr}/8,760 \text{ hrs}) * (2,000 \text{ lbs/ton}) = 0.23 \text{ lbs PM/hr}$$

Actual lbs PM/hr (0.23) is less than the allowable lbs PM/hr (0.32), therefore the woodworking operation will comply with the requirements of 326 IAC 6-3-2.

- (c) Pursuant to 326 IAC 6-3-2 (Process Operations), particulate matter (PM) from the paint booth, identified as PB-1, shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The dry filters shall be in operation at all times the paint booth (PB-1) is in operation, in order to comply with this limit.

#### 326 IAC 8-1-6 (General Reduction Requirements)

Pursuant to CP-039-8896-00466, issued on April 29, 1998

- (a) The sidewall gluing operation, identified as EU-2 consists of gluing carpet, foam, and insulation to fiberglass floors, and sidewalls. The material used from this operation has been changed in order to be exempted from 326 IAC 8-1-6. The potential VOC emissions from this operation are 6.12 tons per year.
- (b) The fiberglass lay-up operation is not subject to 326 IAC 8-1-6, because its potential VOC emissions of 3.37 tons per year are below 25 tons per year.
- (c) The undercoating operation, which applies rubberized coating to make the foam that surrounds the chassis skirt watertight, is not subject to 326 IAC 8-1-6 because its potential VOC emissions of 4.76 tons per year, is below 25 tons per year.
- (d) The hood and door adhesive coating operations, which apply paint to the door and hood fiberglass shell is not subject to 326 IAC 8-1-6 because the VOC potential emissions from these operations at 13.60 tons per year are below 25 tons per year.
- (e) The headliner assembly is not subject to 326 IAC 8-1-6, because its potential VOC emissions of 6 tons per year are below 25 tons per year.

#### 326 IAC 8-2-9 (Miscellaneous Metal Coating)

Pursuant to CP-039-8896-00466, issued on April 29, 1998, the metal chassis painting operation is not subject to this rule, because its VOC potential emissions based on 8,760 hours per year at 8.05 pounds per day, is below 15 pounds per day. Based on the actual hours of operation, the actual VOC emissions will even be a lot lower. Therefore, this operation will be exempted from the requirements of 326 IAC 8-2-9.

#### 326 IAC 8-2-12 (Surface Coating Limitations: Wood Furniture and cabinet coating)

Pursuant to CP-039-8896-00466, issued on April 29, 1998

- (a) The wood trim coating operation's potential VOC emissions at 8760 hours per year are at 5.73 pounds per day, which are below 15 pounds of actual VOC emissions per day. Therefore, this operation will be exempted from 326 IAC 8-2-12.
- (b) However, the source requested that the wood trim coating operation should be subject to this rule, and should comply with 326 IAC 8-2-12 using the method of applications mentioned in the rule.
- (c) The wood trim coating operation is in compliance with this rule using aerosol can spray, which is one of the methods in this rule.

### **Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached calculations for detailed air toxic calculations (Appendix A, page 3).

### **Conclusion**

The operation of this motor home production plant shall be subject to the conditions of the attached proposed **Minor Source Operating Permit No. MSOP 039-11717-00466**.

## Indiana Department of Environmental Management Office of Air Management

### Addendum to the Technical Support Document for Minor Source Operating Permit (MSOP)

**Source Name:** Dynamax Corporation  
**Source Location:** 3733 Lexington Park Drive, Elkhart, IN 46515  
**SIC Code:** 3716  
**County:** Elkhart  
**Operation Permit No.:** MSOP 039-11717-00466  
**Permit Reviewer:** Nishat Hydari/EVP

On March 6, 2000, the Office of Air Management (OAM) had a notice published in the Elkhart Truth, Elkhart, Indiana, stating that Dynamax Corporation had applied for a Minor Source Operating Permit (MSOP) to operate a motor home production plant. The notice also stated that OAM proposed to issue a MSOP for this operation and provided information on how the public could review the proposed MSOP and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this MSOP should be issued as proposed.

On April 5, 2000, Shelly R. Harshberger, Director of Properties at Dynamax Corporation submitted comments. The summary of the comments and corresponding responses is as follows (bolded language has been added, the language with a line through it has been deleted):

#### Comment # 1

##### Section A.1, General Information

Please change the production description to "The Permittee owns and operates a motor home production plant." The remainder of the sentence is irrelevant and not all inclusive. Also, the Authorized Individual should be DeWayne Creighton Jr., President.

#### Response # 1

The following changes have been made to Section A.1 of the permit.

##### A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a ~~stationary~~ motor home production plant ~~which involves the installation of the floor, sidewalls, roof, backwall, frontcap, windows, cabinets, insulation and carpet onto the chassis.~~

Authorized Individual: ~~Dynamax Corporation~~ **DeWayne Creighton Jr., President**  
 Source Address: 3733 Lexington Park Drive, Elkhart, Indiana 46515  
 Mailing Address: P.O. Box 1647, Elkhart, Indiana 46515  
 Phone Number: (219) 262-2212  
 SIC Code: 3716  
 County Location: Elkhart  
 County Status: Attainment for all criteria pollutants

Source Status: Minor Source Operating Permit  
Minor Source, under PSD or Emission Offset Rules;  
Minor Source, Section 112 of the Clean Air Act

## Comment # 2

### Section A.2, Emission Units and Pollution Control Equipment Summary

When defining the emission unit, general assembly emissions and painting emissions should be included. Also, the natural gas-fired heating units, welding operations and woodworking operations are all considered Insignificant Activities and shouldn't be listed as part of the emission unit.

Please reflect the following changes in the welding operations: One (1) steel MIG welder at a rate of 0.33 lbs wire/hr and four (4) aluminum MIG welders at a rate of 0.5 lbs wire/hr each. Please reflect the following changes for woodworking operations: Remove "utilizing one (1) baghouse for particulate matter control." There is no external exhaust and therefore, woodworking emissions are not vented to the atmosphere.

The general assembly and paint booth operations were overlooked. Please make sure the description is the same as the description in Section D.1. The paint booth description, however, should not require specific control efficiency on the dry filters.

## Response # 2

The MSOP permit does not differentiate between significant and insignificant units. Therefore the natural gas-fired heating units, welding operations and woodworking operations are all listed under the emission units and pollution control equipment summary.

The following changes have been made to the welding operation description in Section A.2.

- (f) Welding operation; ~~five (5)~~ **one (1)** steel MIG welding stations, ~~each~~ with a maximum wire consumption rate of ~~8-8~~ **0.33** pounds of wire per hour (lb wire/hr), ~~one (1)~~ **four (4)** aluminum MIG welding stations, ~~each~~ with a maximum wire consumption rate of ~~0-4~~ **0.5** lb wire/hr, two (2) oxyacetylene flame cutters, each with a maximum cutting rate of 28 inches per minute, and one (1) plasma cutter, with a maximum cutting rate of 155 inches per minute;

The following changes have been made to Section D.1.4(a) as a result of the changes made to the welding operation.

The revised process weight rate of the welding operation is:

$$\text{Process weight rate} = (1 \text{ station} * 0.33 \text{ lbs/hr}) + (4 \text{ stations} * 0.5 \text{ lbs/hr}) = 2.33 \text{ lbs/hr} = 1.165\text{E-}3 \text{ tons/hr}$$

### D.1.4 Particulate Matter (PM) [326 IAC 6-3-2(c)]

- (a) Pursuant to 326 IAC 6-3-2 (Process Operations), particulate matter (PM) from the welding operation shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

$$E = 4.10 * (0.0222 \text{ } \mathbf{1.165E-3})^{0.67} = 0.32 \text{ } \mathbf{0.04} \text{ lbs PM/hour}$$

Based on the above equation, particulate matter emissions from the welding operation shall be limited to ~~0.32~~ **0.04** pounds per hour.

The following changes have been made to the woodworking description in Section A.2.

- (g) Woodworking operation with a maximum throughput of 724 pounds of wood per hour, which consists of various woodworking equipment, ~~utilizing one (1) baghouse for particulate matter control;~~ and

The general assembly and paint booth operations were not overlooked and are listed on the next page. The following changes have been made to the paint booth description in Section A.2.

- (h) One (1) paint booth, identified as PB-1, equipped with air assisted airless guns, for painting 0.5 motor homes per hour, using dry filters ~~with a 90% control efficiency~~ for overspray control, and exhausting to stacks C1 and C2.

### Comment # 3

Section B.6, Minor Source Operating Permit

B.6(a) it should be noted that an Affidavit of Construction was submitted on May 4, 1998 following the issuance of the Construction Permit on April 29, 1998.

### Response # 3

IDEM, OAM realizes that Section B.6, Minor Source Operating Permit does not apply to Dynamax Corporation because there is not new construction. The entire B.6 Section has been deleted from the permit.

~~B.6 Minor Source Operating Permit [326 IAC 2-6.1]~~

~~This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1- when, prior to start of operation, the following requirements are met:~~

- ~~(a) The attached Affidavit of Construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section.~~

- ~~(1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.~~

- ~~(2) If the Affidavit of Construction does not verify that the facilities covered in this~~

~~Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.~~

- ~~———— (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.~~
- ~~———— (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.~~
- ~~———— (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).~~
- ~~———— (e) Pursuant to 326 IAC 2-6.1-7, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. If IDEM, OAM, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.~~

#### Comment # 4

##### Section C.4, Inspection and Entry

C.4(e) It is unreasonable to impose a blanket authorization of the use of photographic or recording equipment when not so authorized under any regulatory provision.

#### Response # 4

Photographs are routinely taken to document conditions during an inspection, and are therefore included. The use of cameras or other recording, testing, or monitoring equipment for the purpose of assuring compliance with this permit, if necessary, is a reasonable extension of this documentation.

The following changes have been made to Section C.4 as a result of this comment.

- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
- (1) **The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC**

**17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]**

#### **Comment # 5**

##### **Section C.19, Annual Notification**

This requirement is redundant to the Quarterly Compliance Monitoring Reports, burdensome and unnecessary to determine compliance.

#### **Response # 5**

In order for IDEM to verify the source is in compliance and still operating, an annual notification must be submitted by Dynamax Corporation. IDEM, OAM does not feel submitting one annual notification document is burdensome.

Section C.18(a) states "To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report." This is just a general condition listed in all Minor Source Operating Permits. Dynamax is not required to submit any Quarterly Compliance Monitoring Reports at all. Consequently, Section C.18 (General Reporting Requirements) will be deleted from the permit and Section C.19 (Annual Notification) will be re-numbered accordingly.

#### ~~C.18 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-5] [IC 13-14-1-13]~~

- ~~(a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~
- ~~(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015~~
- ~~(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.~~
- ~~(d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~



- ~~(e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:~~
- ~~(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or~~
- ~~(2) A malfunction as described in 326 IAC 1-6-2; or~~
- ~~(3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.~~
- ~~(4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.~~
- ~~A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.~~
- ~~(f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.~~
- ~~(g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.~~

C.198 Annual Notification [326 IAC 2-6.1-5(a)(5)]

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#### **Comment # 6**

##### Section D.1

Please make the changes as requested earlier in Section A.2 Emission Units and Pollution Control Equipment Summary.

#### **Response # 6**

The following changes have been made to the facility description in Section D.1.

#### **SECTION D.1**

#### **EMISSIONS UNIT OPERATION CONDITIONS**

**Emissions Unit Description**

- (a) Six (6) natural gas-fired radiant heaters, identified as R1 through R6, each with a maximum heat input capacity of 0.06 million (MM) British thermal units (Btu) per hour;
- (b) Four (4) natural gas-fired radiant heaters, identified as R7 through R10, each with a maximum heat input capacity of 0.08 MMBtu per hour;
- (c) Four (4) natural gas-fired radiant heaters, identified as R11 through R14, each with a maximum heat input capacity of 0.1 MMBtu per hour;
- (d) One (1) natural gas-fired radiant heater, identified as R15, with a maximum heat input capacity of 0.115 MMBtu per hour;
- (e) Two (2) radiant heaters, identified as R16 and R17, each with a maximum heat input capacity of 0.4 MMBtu per hour;
- (f) Welding operation; ~~five (5)~~ **one (1)** steel MIG welding stations, each with a maximum wire consumption rate of ~~8-8~~ **0.33** pounds of wire per hour (lb wire/hr), ~~one (1)~~ **four (4)** aluminum MIG welding stations, each with a maximum wire consumption rate of ~~0-4~~ **0.5** lb wire/hr, two (2) oxyacetylene flame cutters, each with a maximum cutting rate of 28 inches per minute, and one (1) plasma cutter, with a maximum cutting rate of 155 inches per minute;
- (g) Woodworking operation with a maximum throughput of 724 pounds of wood per hour, which consists of various woodworking equipment; ~~utilizing one (1) baghouse for particulate matter control;~~ and
- (h) One (1) paint booth, identified as PB-1, equipped with air assisted airless guns, for painting 0.5 motor homes per hour, using dry filters with a ~~90% control efficiency~~ for overspray control, and exhausting to stacks C1 and C2.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

**Comment # 7**

Section D.1.4, Particulate Matter

Rule 326 IAC 6-3-2 is not intended to apply to sources with process weight rates below 100 pounds per hour and therefore should not be applicable to the welding, woodworking and painting operations.

**Response # 7**

Since there is no emission level for applicability to 326 IAC 6-3-2(c), this rule is subject to any process that has the potential to emit Particulate Matter (PM). Therefore, processes that are significant or insignificant are subject to the requirements of 326 IAC 6-3-2(c). There will be no changes to this condition in the final permit due to this comment.

**Comment # 8**

Section D.1.9, Monitoring

We request the reference to daily and weekly inspections be removed because it proceeds from the unsupported assumption that dry filters are necessary to maintain compliance with Rule 6-3 with regard to overspray. Even if filters were necessary, the regulations require monitoring to be any form of collecting data on a routine basis to determine or otherwise assess compliance with emission limitations or standards. Daily and weekly inspections requirements are unnecessary and unreasonable.

## Response # 8

Complying with the requirements of 326 IAC 6-3-2 can be especially variable for paint booths. The actual substrate being painted and the solids content of the paint being used can affect the process weight rate, the gallons or pounds of solid used, transfer efficiency, or other factors that directly affect actual, allowable, or potential emissions. While permit applications contain representative information regarding these factors, relying on this information as an ongoing demonstration of compliance is difficult if the factors are not themselves enforceable. The OAM does not believe that it would be generally advisable to include these factors as permit conditions, to make them enforceable or to presume that they are so fixed they define a source's potential emissions because either could severely limit a source's operational flexibility. Properly operating the air pollution controls that are already in place is generally adequate to demonstrate compliance with 326 IAC 6-3 in lieu of a stack test and also assures compliance with applicable rules limiting fugitive dust, opacity, and (when necessary) Potential to Emit. The OAM believes that checking the placement and integrity of the filters once a day is a very effective means of ensuring proper operation and ongoing compliance. The OAM has re-evaluated the other compliance monitoring provisions related to evidence of actual emissions from the paint booths and believes that less resource intensive provisions are appropriate. The frequency of visible emissions evaluations has been changed from daily to weekly. The frequency of inspections of rooftops or other surfaces for a noticeable change in solids deposition has been changed from weekly to monthly. No changes have been made to the permit as a result of this comment.

## Comment # 9

### Section D.1.10, Record Keeping Requirements

(a) This states that records "shall be taken daily". What regulation would require daily VOC usage tracking for a minor source? We believe the monthly recordkeeping and annual emissions inventory requirements are sufficient to determine compliance with the permit limitations.

This states that "solvent usage records shall differentiate between those added to coatings and those used as clean up solvents." Please remove this condition from the proposed permit. We believe this is over burdensome and it is not necessary to determine compliance with permit limitations.

A log of the dates of use is unnecessary and over burdensome. Please remove this condition from the proposed permit.

Cleanup solvent usage for each day is over burdensome and it is not necessary to determine compliance with permit limitations.

Daily VOC usage tracking is over burdensome. We request the daily VOC usage tracking be deleted.

(b) We request this requirement be changed to correspond to the requested changes in D.1.9.

## Response # 9

The following changes have been made to Section D.10 as a result of this comment.

### D.1.10 Record Keeping Requirements

- 
- (a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken **monthly for Condition D.1.1 and daily for Condition D.1.2** and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1 and D.1.2.

- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
  - (2) A log of the dates of use;
  - (3) The cleanup solvent usage for each **month or each day as applicable**;
  - (4) The total VOC usage for each **month or each day as applicable**; and
- (b) To document compliance with Condition D.1.8, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**Comment # 10**

Section C.17, General Record Keeping Requirements  
Please verify the rule citation.

**Response # 10**

326 IAC 2-6.1-2 is the applicability citation for the Minor Source Operating Program. It does not specifically mention general record keeping requirements. The correct cite is 326 IAC 2-6.1-5. The following changes have been made to Section C.17 as a result of this comment.

**C.17 General Record Keeping Requirements [326 IAC 2-6.1-2 5]**

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- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

### Comment # 11

Section C.18, General Reporting Requirements  
Please verify the rule citation.

### Response # 11

326 IAC 2-1.1-11 states "The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA. The provisions of this section shall apply to all sources issued a registration, permit, modification approval, or permit revision under this article.

IC 13-14-1-13 states "The commissioner shall establish and administer monitoring and reporting requirements as necessary to carry out the duties and to exercise the powers provided in the following:

- (1) Air pollution control laws
- (2) Water pollution control laws
- (3) Environmental management laws"

326 IAC 2-6.1-2 is the applicability citation for the Minor Source Operating Program. It does not specifically mention general record keeping requirements. The correct cite is 326 IAC 2-6.1-5. The following changes have been made to Section C.18 as a result of this comment.

C.18 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2 5] [IC 13-14-1-13]

---

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly. Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

### Comment # 12

Section D.1.10 Recordkeeping Requirements

(b) Please delete "weekly observations of the water level in the pans" because it is not applicable.

### Response # 12

Since there are no water pans or baffle booths at this source, the following change has been made to Section D.1.10(b).

- (b) To document compliance with Condition D.1.8, the Permittee shall maintain a log of weekly overspray observations, ~~weekly observations of the water level in the pans,~~ daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

The following revisions have been made to the Technical Support Document under the appropriate sections (**bolded** language has been added, the language with a line through it has been deleted). The OAM prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

### Comment # 13

It states that no previous emission data has been received from the source. Please note that Dynamax did previously submit an emissions inventory in 1999 (Reporting Year 1998) as required.

### Response # 13

IDEM did receive the emission inventory for reporting year 1998. The following changes have been made as a result of this comment.

### Actual Emissions

~~No previous emission data has been received from the source.~~

**The following table shows the actual emissions from the source. This information reflects the 1998 OAM emission data.**

Pollutant	Actual Emissions (tons/year)
PM	0.00
PM-10	0.00
SO <sub>2</sub>	0.00
VOC	1.00
CO	0.00
NO <sub>x</sub>	0.00
HAP (specify)	0.00

### Comment # 14

Welding emission calculations should be changed to reflect the changes requested on Page 4 of 5 TSD Appendix A (below).

### Response # 14

The potential to emit of PM has changed due to the welding calculations being revised. 326 IAC 6-3-2 (Process Operations) has been revised to reflect this change.

The revised process weight rate of the welding operation is:

Process weight rate = (1 station \* 0.33 lbs/hr) + (4 stations \* 0.5 lbs/hr) = 2.33 lbs/hr = 1.165E-3 tons/hr

- (b) Pursuant to 326 IAC 6-3-2 (Process Operations), particulate matter (PM) from the welding operation shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

$$E = 4.10 * (0.0222 \text{ } 1.165E-3)^{0.67} = 0.32 \text{ } 0.04 \text{ lbs PM/hour}$$

Based on the above equation, particulate matter emissions from the welding operation shall be limited to ~~0.32~~ **0.04** pounds per hour.

Compliance calculation:

$$(\text{1.02 } 0.10 \text{ tons PM/yr}) * (\text{yr}/8,760 \text{ hrs}) * (2,000 \text{ lbs/ton}) = 0.23 \text{ } 0.02 \text{ lbs PM/hr}$$

Actual lbs PM/hr (~~0.23~~ **0.02**) is less than the allowable lbs PM/hr (~~0.32~~ **0.04**), therefore the woodworking operation will comply with the requirements of 326 IAC 6-3-2.

**Comment # 15**

A calculation does not reflect the information submitted in the application. Please change the following item:

1. The flash off for the featherite filter is 0.35%.

**Response # 15**

The 35% flash off factor for the featherite filter was included in the calculations. The VOC emissions (tons/yr) from the featherite filter were calculated as follows:

Featherite filter VOC emissions (tons/yr) = (density (lbs/gal) \* weight % volatile (%) \* gallons of material (gal/unit) \* maximum # of units per hour (unit/hr) \* 8760 hrs/yr) / 2000 lbs/ton \* flash off factor (0.35%)

Featherite filter VOC emissions (tons/yr) = (9.6 lbs/gal \* 20% \* 0.50 gal/unit \* 0.50 unit/hr \* 8760 hrs/yr) / 2000 lbs/ton \* 0.35% = 0.01 tons/yr

No changes were made to the permit as a result of this comment.

**Comment # 16**

Several calculations do not reflect the information submitted in the application. Please change the following items.

1. Black water-reducible paint cobalt emissions should be 0.012 tons/yr.
2. Trim flat black paint ethyl benzene content is only 0.1% and therefore ethyl benzene emissions should only be 0.01 tons/yr.
3. What emissions factor is being applied to the Featherite body filter styrene emissions?
4. Crazy Clean glycol ether emissions should only be 0.04 tons/yr.

**Response # 16**

1. The cobalt emissions from the black water-reducible paint were calculated as follows:

Cobalt emission (tons/yr) = (density (lbs/gal) \* gallons of material (gal/unit) \* maximum # of units per hour (unit/hr) \* weight % cobalt (%) \* 8760 hrs/yr) / 2000 lbs/ton

Cobalt emission (tons/yr) = (9.2 lbs/gal \* 0.25 gal/unit \* 0.50 unit/hr \* 1.00% \* 8760 hrs/yr) / 2000 lbs/ton = 0.05 tons/yr

No changes were made to the calculations as a result of this comment.

2. The trim black paint ethyl benzene content has been changed to 0.1%. The calculations have been revised. The revised HAP calculation sheet (Page 3 of 5 of TSD Addendum App A) is attached.
3. The emission factor applied to the Featherite body filter styrene emissions have been changed to 0.35%. The revised HAP calculation sheet (Page 3 of 5 of TSD Addendum App A) is attached.

4. The glycol ether emissions from the crazy clean were calculated as follows:

Glycol ether emission (tons/yr) = (density (lbs/gal) \* gallons of material (gal/unit) \* maximum # of units per hour (unit/hr) \* weight % glycol ether (%) \* 8760 hrs/yr) / 2000 lbs/ton  
Cobalt emission (tons/yr) = (8.3 lbs/gal \* 0.23440 gal/unit \* 0.50 unit/hr \* 4.55% \* 8760 hrs/yr) / 2000 lbs/ton = 0.19 tons/yr

No changes were made to the calculation as a result of this comment.

#### Comment # 17

Please change the welding calculations to reflect the following:

One (1) steel MIG welding station with a maximum electrode consumption of 0.33 lbs/hr.

Four (4) aluminum MIG welding stations with a maximum electrode consumption of 0.5 lbs/hr/station.

#### Response # 17

The welding calculations have been revised. The revised welding calculation sheet (Page 4 of 5 of TSD Addendum App A) is attached.

The following revisions have been made to the Technical Support Document under the Permitted Emission Units and Pollution Control Equipment section, Potential to Emit table and the Source Status table (**bolded** language has been added, the language with a line through it has been deleted). The OAM prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

#### Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (f) Welding operation; ~~five (5)~~ **one (1)** steel MIG welding stations, ~~each~~ with a maximum wire consumption rate of ~~8-8~~ **0.33** pounds of wire per hour (lb wire/hr), ~~one (1)~~ **four (4)** aluminum MIG welding stations, ~~each~~ with a maximum wire consumption rate of ~~0-4~~ **0.5** lb wire/hr, two (2) oxyacetylene flame cutters, each with a maximum cutting rate of 28 inches per minute, and one (1) plasma cutter, with a maximum cutting rate of 155 inches per minute;



- (g) Woodworking operation with a maximum throughput of 724 pounds of wood per hour, which consists of various woodworking equipment, ~~utilizing one (1) baghouse for particulate matter control~~; and
- (h) One (1) paint booth, identified as PB-1, equipped with air assisted airless guns, for painting 0.5 motor homes per hour, using dry filters ~~with a 90% control efficiency~~ for overspray control, and exhausting to stacks C1 and C2.

## Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	<del>10.79</del> <b>9.87</b>
PM-10	<del>10.84</del> <b>9.92</b>
SO <sub>2</sub>	0.01
VOC	41.11
CO	0.73
NO <sub>x</sub>	0.87

HAP's	Potential To Emit (tons/year)
Ethyl Benzene	<del>0.18</del> <b>0.00</b>
Cobalt Compounds	0.05
MEK	2.09
Styrene	<del>3.61</del> <b>3.29</b>
Xylene	7.27
Toluene	2.81
Cumene	0.00
Hexane	2.89
Glycol Ethers	3.06
MIK	1.13
Methyl Methacrylate	0.57
Manganese	<del>0.06</del> <b>0.00</b>
<b>TOTAL</b>	<del>23.73</del> <b>23.16</b>

## Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	<del>3.76</del> <b>2.84</b>
PM10	<del>3.84</del> <b>2.89</b>
SO <sub>2</sub>	0.01
VOC	41.11
CO	0.73
NO <sub>x</sub>	0.87
Single HAP	7.27
Total HAPs	<del>23.73</del> <b>23.16</b>

## Appendix A: Emission Calculations

**Company Name:** Dynamax Corporation  
**Address City IN Zip:** 3733 Lexington Park Drive, Elkhart, IN 46515  
**CP:** 039-11717  
**Plt ID:** 039-00466  
**Reviewer:** Nishat Hydari / EVP

Uncontrolled Potential Emissions (tons/year)					
Emissions Generating Activity					
Pollutant	Natural Gas Combustion	Surface Coating	Welding Operation	Woodworking Operation	TOTAL
PM	0.02	3.81	2.42	3.62	9.87
PM10	0.07	3.81	2.42	3.62	9.92
SO2	0.01	0.00	0.00	0.00	0.01
NOx	0.87	0.00	0.00	0.00	0.87
VOC	0.05	41.06	0.00	0.00	41.11
CO	0.73	0.00	0.00	0.00	0.73
total HAPs	0.00	23.16	0.00	0.00	23.16
worst case single HAP	0.00	7.27	0.00	0.00	7.27
Total emissions based on rated capacity at 8,760 hours/year.					
Controlled Potential Emissions (tons/year)					
Emissions Generating Activity					
Pollutant	Natural Gas Combustion	Surface Coating	Welding Operation	Woodworking Operation	TOTAL
PM	0.02	0.38	2.42	0.02	2.84
PM10	0.07	0.38	2.42	0.02	2.89
SO2	0.01	0.00	0.00	0.00	0.01
NOx	0.87	0.00	0.00	0.00	0.87
VOC	0.05	41.06	0.00	0.00	41.11
CO	0.73	0.00	0.00	0.00	0.73
total HAPs	0.00	23.16	0.00	0.00	23.16
worst case single HAP	0.00	7.27	0.00	0.00	7.27
Total emissions based on rated capacity at 8,760 hours/year, after control.					

**Appendix A: Emissions Calculations  
VOC and Particulate  
From Surface Coating Operations**

**Company Name:** Dynamax Corporation  
**Address City:** 3733 Lexington Park Drive, Elkhart, IN 46515  
**CP:** 039-11717  
**Plt ID:** 039-00466  
**Reviewer:** Nishat Hydari / EVP

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	Lb VOC/gal solids	Transfer Efficiency
<b>Chasis Painting</b>																
Black water-reducible DTI	9.2	74.96%	45.8%	29.2%	50.5%	28.36%	0.25000	0.500	5.42	2.68	0.34	8.05	1.47	0.32	9.46	75%
<b>Sidewall</b>																
Hot melt adhesive	7.8	0.00%	0.0%	0.0%	0.0%	0.00%	11.25000	0.500	0.00	0.00	0.00	0.00	0.00	0.00	ERR	100%
Sidewall reinforcement - s	9.7	9.77%	0.0%	9.8%	0.0%	0.00%	2.95000	0.500	0.95	0.95	1.40	33.55	6.12	0.00	ERR	100%
<b>Headliner Assembly</b>																
Benders adhesive #618	6.6	83.00%	0.0%	83.0%	0.0%	0.00%	0.50000	0.500	5.48	5.48	1.37	32.87	6.00	0.31	ERR	75%
<b>Hood and Door Assemb</b>																
Gloss black aerosol	6.9	85.00%	25.0%	60.0%	0.0%	0.00%	1.50000	0.500	4.14	4.14	3.10	74.52	13.60	0.85	ERR	75%
ITW Plexus adhesive	7.8	85.00%	0.0%	85.0%	0.0%	0.00%	0.03960	0.500	6.63	6.63	0.13	3.15	0.57	0.00	ERR	100%
<b>Wood Trim</b>																
Benders adhesive #501	9.2	56.00%	0.0%	56.0%	0.0%	0.00%	0.25000	0.500	5.15	5.15	0.64	15.46	2.82	0.55	ERR	75%
Trim flat black paint	9.0	58.90%	0.0%	58.9%	0.0%	0.00%	0.09000	0.500	5.30	5.30	0.24	5.73	1.04	0.18	ERR	75%
<b>Final Finish &amp; Repair</b>																
Featherrite body filler	9.6	20.00%	0.0%	20.0%	0.0%	0.00%	0.50000	0.500	1.92	1.92	0.48	11.52	0.01	0.00	ERR	100%
Rubberized undercoating	8.3	65.70%	0.0%	65.7%	0.0%	0.00%	0.39840	0.500	5.45	5.45	1.09	26.07	4.76	0.62	ERR	75%
Crazy clean	8.3	7.90%	0.0%	7.9%	0.0%	0.00%	0.23440	0.500	0.66	0.66	0.08	1.84	0.34	0.98	ERR	75%
<b>Plumbing Assembly</b>																
ABS cement (plastic pipes)	7.2	73.00%	0.0%	73.0%	0.0%	0.00%	0.08330	0.500	5.26	5.26	0.22	5.25	0.96	0.00	ERR	100%
<b>Fiberglass Lay-Up</b>																
Resin (hand lay-up)	9.2	36.20%	0.0%	36.2%	0.0%	0.00%	3.00000	0.500	3.33	3.33	0.77	18.46	3.37	0.00	ERR	100%

<b>State Potential Emissions</b>	<b>Add worst case coating to all solvents</b>	<b>9.85</b>	<b>236.47</b>	<b>41.06</b>	<b>3.81</b>
<b>Total Controlled Potential PM/PM10 emissions*</b>					<b>0.38</b>

The 15.4% flash off factor for styrene was based on the Final Report from EPA and from research documents published by the Fiberglass Manufacturing Industry.

Hot melt adhesive = 8 gr/sq ft \* 479.5 sq ft/unit \* lb/453.3 gr \* gal/7.8 lb = 11.25 gal/unit

Featherrite Filler has a flash off of 0.35%.

\*Dry filters with a 90% control efficiency

**METHODOLOGY**

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

## Appendix A: Emission Calculations

### HAP Emission Calculations

Compar Dynamax Corporation

Address: 3733 Lexington Park Drive, Elkhart, IN 46515

CP#: 039-11717

Plt ID: 039-00466

Permit # Nishat Hydari / EVP

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Ethyl Benzene	Weight % Cobalt Ch	Weight % MEK	Weight % Styrene	Weight % Xylene	Weight % Toluene	Weight % Cumene	Weight % Hexane	Weight % Glycol Ethe	Weight % MIK	Weight % Methyl Methacry	Ethyl Benzene Emission s (ton/yr)	Cobalt Cmp Emissions (ton/yr)	MEK Emissions (ton/yr)	Styrene Emission s (ton/yr)	Xylene Emission s (ton/yr)	Toluene Emission s (ton/yr)	Cumene Emission s (ton/yr)	Hexane Emission s (ton/yr)
Chasis Painting																						
Black water-reducible DT	9.2	0.250000	0.50	0.00%	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12.00%	0.00%	0.00%	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00
Sidewall																						
Hot melt adhesive	7.8	*****	0.50	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sidewall reinforcement - s	9.7	2.950000	0.50	0.00%	0.00%	0.00%	0.00%	0.00%	9.77%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	6.12	0.00	0.00	0.00
Headliner Assembly																						
Benders adhesive #618	6.6	0.500000	0.50	0.00%	0.00%	0.00%	0.00%	0.00%	*****	0.00%	*****	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	1.37	0.00	2.89
Hood & Door Assembl																						
Gloss black aerosol	6.9	1.500000	0.50	0.00%	0.00%	5.00%	0.00%	5.00%	0.00%	0.00%	0.00%	10.00%	5.00%	0.00%	0.00	0.00	1.13	0.00	1.13	0.00	0.00	0.00
ITW Plexus adhesive	7.8	0.039600	0.50	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	85.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Trim																						
Trim flat black paint	9	0.090000	0.50	0.10%	0.00%	0.00%	0.00%	1.00%	*****	0.10%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.02	0.35	0.00	0.00
Final Finish & Repair																						
Featherite body filler	9.6	0.500000	0.50	0.00%	0.00%	0.00%	*****	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Rubberized undercoating	8.3	0.398400	0.50	0.00%	0.00%	0.00%	0.00%	0.00%	*****	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	1.09	0.00	0.00
Crazy Clean	8.3	0.234400	0.50	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.55%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Plumbing Assembly																						
ABS Cement	7.2	0.083300	0.50	0.00%	0.00%	*****	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.96	0.00	0.00	0.00	0.00	0.00
Fiberglass Lay-Up																						
Resin (hand lay-up)	9.2	3.000000	0.50	0.00%	0.00%	0.00%	*****	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	3.29	0.00	0.00	0.00	0.00

Total State Potential Emissions

**0.00      0.05      2.09      3.29      7.27      2.81      0.00      2.89**

The 15.4% flash off factor for styrene (non-spray resin) was based on the Final Report from EPA and from research documents published by the Fiberglass Manufacturing Industry.

Featherite body filter has a flash off of 0.35%.

### METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Weight % HAP \* 8760 hrs/yr \* 1 ton/2000 lbs

Glycol Ethers Emissions (ton/yr)	MIK Emission s (ton/yr)	Methyl Methacrylate Emissions (ton/yr)
0.60	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
2.27	1.13	0.00
0.00	0.00	0.57
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.19	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
<b>3.06</b>	<b>1.13</b>	<b>0.57</b>

**Company Name** Dynamax Corporation  
**Address City** 13733 Lexington Park Drive, Elkhart, IN 46515  
**Permit No./Plt** 039-11717  
**Reviewer:** 039-00466  
**Date:** Nishat Hydari / EVP

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)		EMISSION FACTORS * (lb pollutant / lb electrode)				EMISSIONS (lb/hr)				TOTAL HAPS (lb/hr)
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
WELDING												
Steel MIG welding (E70S-3)	1	0.33		0.0052	0.00032	1E-05	1E-05	0.002	0.00010494	0.000	3.3E-06	0.000
Aluminum MIG welding (40)	4	0.5		0.0107				0.021				0.000
FLAME CUTTING	Number of Stations	Max. Metal Thickness Cut (in.)	Max. Metal Cutting Rate (in./minute)	EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick)				EMISSIONS (lbs/hr)				TOTAL HAPS (lb/hr)
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Oxyacetylene	2	0.625	28	0.1622	0.0005	0.0001	0.0003	0.341	0.000	0.000	0.000	0.000
Plasma	1	0.125	155	0.1622	0.0005	0.0001	0.0003	0.189	0.000	0.000	0.000	0.000
EMISSION TOTALS								PM = PM10	Mn	Ni	Cr	Total HAPs
Potential Emissions lbs/hr								0.55	0.00	0.00	0.00	0.00
Potential Emissions lbs/day								13.26	0.01	0.00	0.00	0.01
Potential Emissions tons/yr								2.42	0.00	0.00	0.00	0.00

#### METHODOLGY

\*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column. Consult AP-42 or other reference for different electrode types.

Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)

Cutting emissions, lb/hr: (# of stations)(max. metal thickness, in.)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" thick)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.

Plasma cutting emission factors are from the American Welding Society study published in Sweden (March 1994).

Welding and other flame cutting emission factors are from an internal training session document.

See AP-42, Chapter 12.19 for additional emission factors for welding.

**Appendix A: Emissions Calculations**  
**Natural Gas Combustion Only**  
**MM BTU/HR <100**

**Company Name:** Dynamax Corporation  
**Address:** 3733 Lexington Park Drive, Elkhart, IN 46515  
**CP:** 039-11717  
**Plt ID:** 039-00466  
**Reviewer:** Nishat Hydari / EVP

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
MMCF/yr

2.0

17.5

Heat Input Capacity includes the following:

Facilities	Radiant Heat No. of unit	MMBtu/hr	Total MMBtu/hr
R1 - R6	6	0.06	0.36
R7 - R10	4	0.08	0.32
R11 - R14	4	0.1	0.4
R15	1	0.115	0.115
R16 - R17	2	0.4	0.8
<b>Total</b>	<b>17</b>		<b>1.995</b>

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.02	0.07	0.01	0.87	0.05	0.73

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.  
MMBtu = 1,000,000 Btu



MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

When using the  
above emission factors to  
confirm that the correct